

LISTING OF THE CLAIMS:

1 (Currently amended). A method for identifying an agent which modulates the binding of a Repulsive Guidance Molecule (RGM) to a Neogenin, the method comprising the steps of: (a) forming a mixture comprising an isolated mammalian RGM₁ and an isolated mammalian Neogenin, having an amino acid sequence of at least 70% identity to SEQ ID NO:5; (b) incubating said mixture in the presence of an agent; and (c) detecting in the incubated mixture of step (b) the level of specific binding between said RGM₁ and said Neogenin, wherein a difference in the detected level of specific binding of said RGM₁ to said Neogenin in the presence of said agent relative to the level of specific binding in the absence of said agent indicates that said agent modulates the binding of said RGM to said Neogenin, wherein said RGM is RGM A or RGM B.

2. (Currently amended). A method for monitoring the binding of a Repulsive Guidance Molecule (RGM) to a Neogenin, the method comprising the steps of: (a) contacting a first protein comprising said RGM₁ tagged with a visible stain or enzymatic signal, with a second protein which comprises the Neogenin, wherein said Neogenin has an amino acid sequence of at least 70% identity to SEQ ID NO:5 and with a RGM A-specific antibody, a RGM B specific antibody or small molecule which will interfere in the binding between the tagged RGM A or RGM B and the Neogenin; (b) leaving the mixture for at time and under conditions where a domain of the RGM A or RGM B binds to a domain of the Neogenin; and (c) monitoring the binding of the first protein which comprises the tagged RGM₁ to the second protein which comprises the Neogenin, wherein a reduction in the visible stain or enzymatic signal indicates a reduction of tagged RGM₁ binding to Neogenin due to the antibody or small molecule interacting with said binding, wherein said RGM is RGM A or RGM B.

3. (Cancelled).

4. (Cancelled).

5. (Cancelled).

6. (Cancelled).

7. (Cancelled).

8. (Cancelled).

9. (Cancelled).

10. (Cancelled).

11. (Cancelled).

12. (Cancelled).

13. (Cancelled).

14. (Cancelled).

15. (Cancelled).

16. (Cancelled).